

Aortic Stenosis Questions

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Question 1

- 32 y/o female
- In the USA for 11 months
- 16 weeks pregnant
- A murmur noted on OB exam

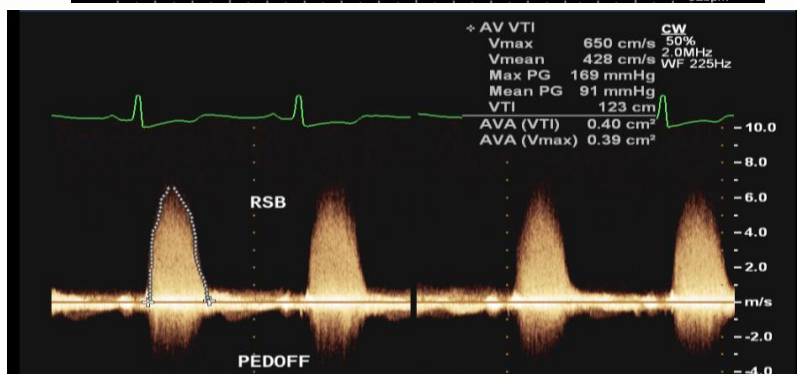
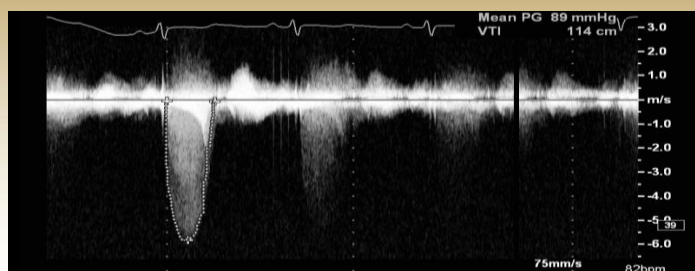


Question 1



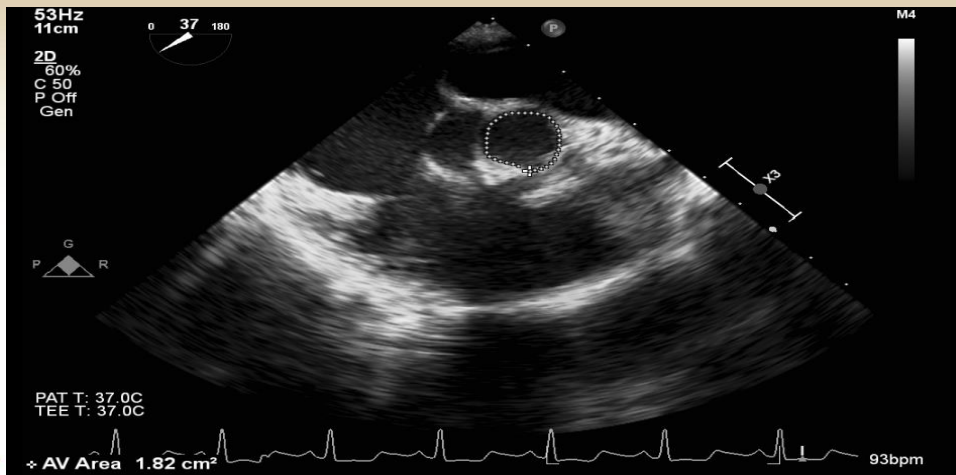
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Question 4



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Question 1



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AVA Planimetry: 1.8 cm²

Question 1

- A. The patient has a high coefficient of orifice contraction
- B. The patient has a congenital aortic stenosis
- C. The patient has a central aortic jet
- D. The patient will have echo and catheter discordance of gradients

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Answer to Question 1

B. The patient has congenital aortic stenosis



Question 1

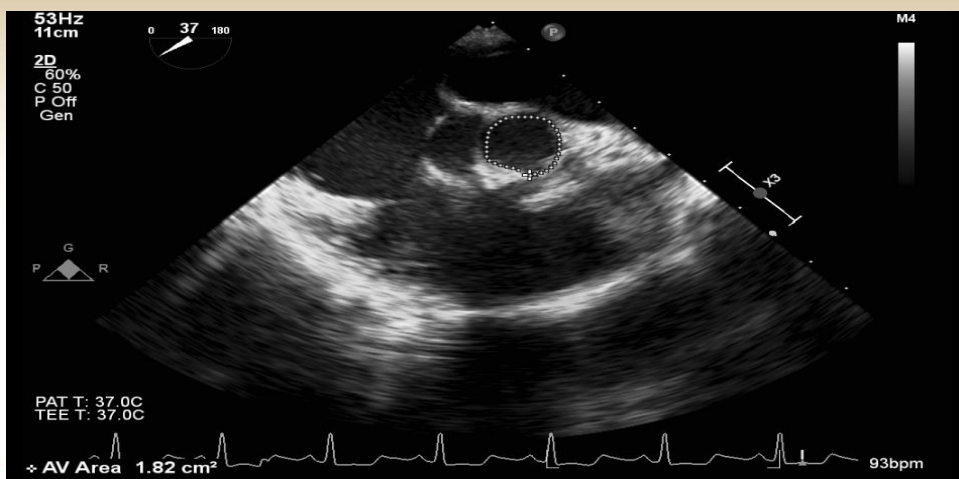


Question 1



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Question 4



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AVA Planimetry: 1.8 cm²

Severe Aortic Stenosis?

Mean AV Gradient
89-91 mmHg

Planimetry
1.8 cm²

Echo Valve Area
0.4 cm²



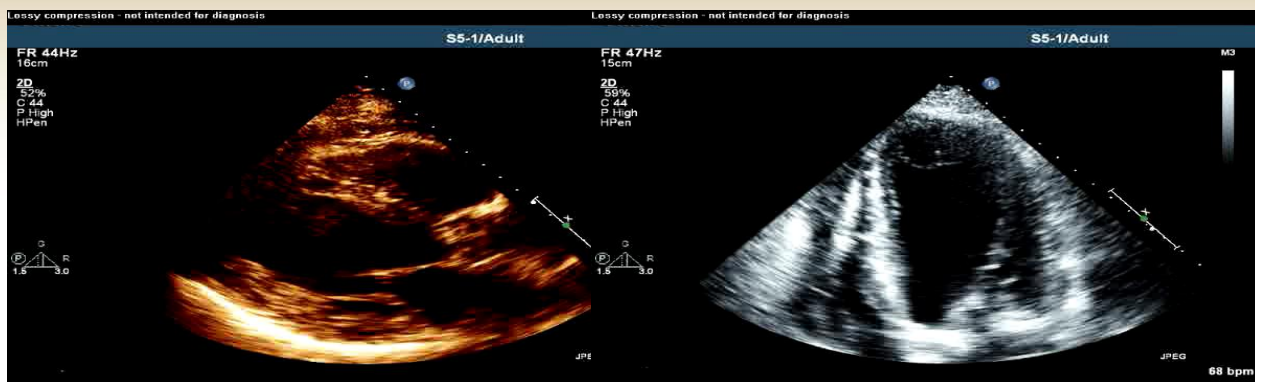
Question 1

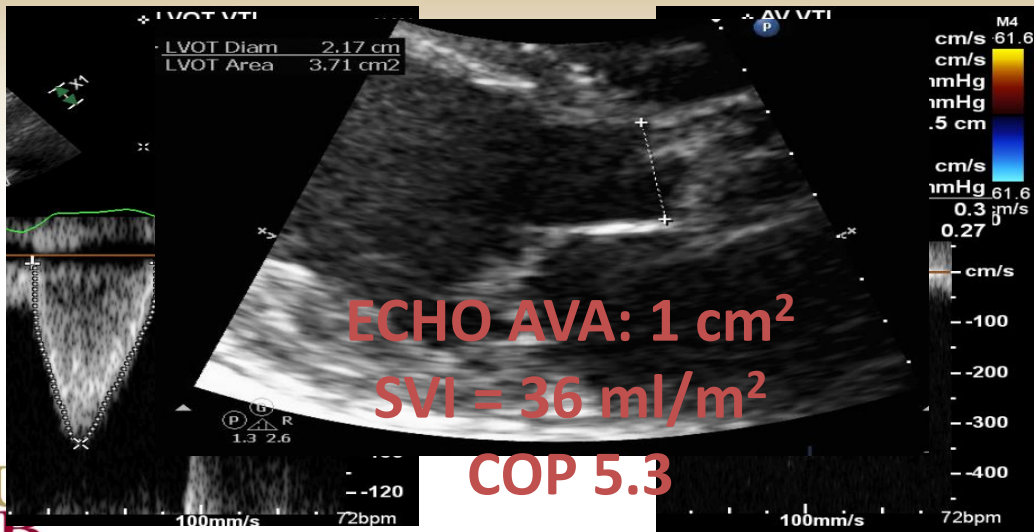
- Patient was asymptomatic
- Delivered at 38 weeks with elective CS
- Aorta at 4.2 cm by CTA
- Continues to be asymptomatic
- Meets criteria for Very Severe AS by all guidelines



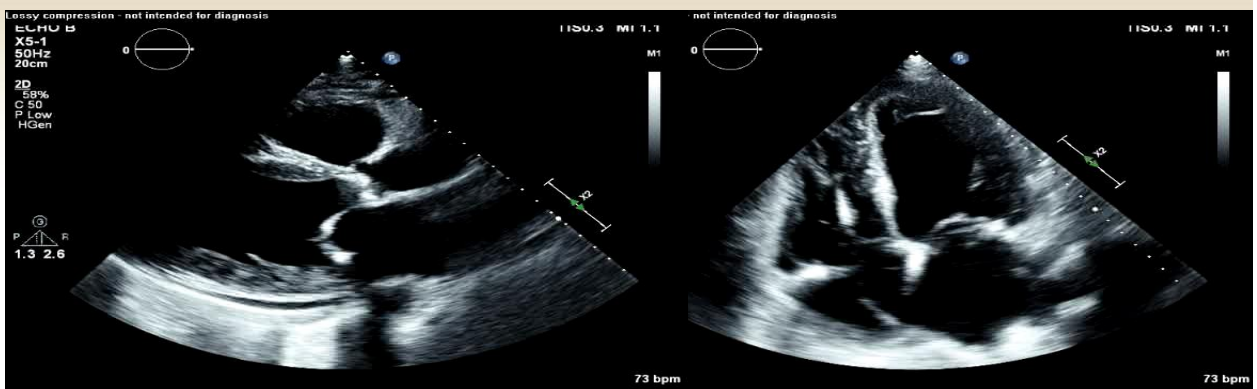
Question 2

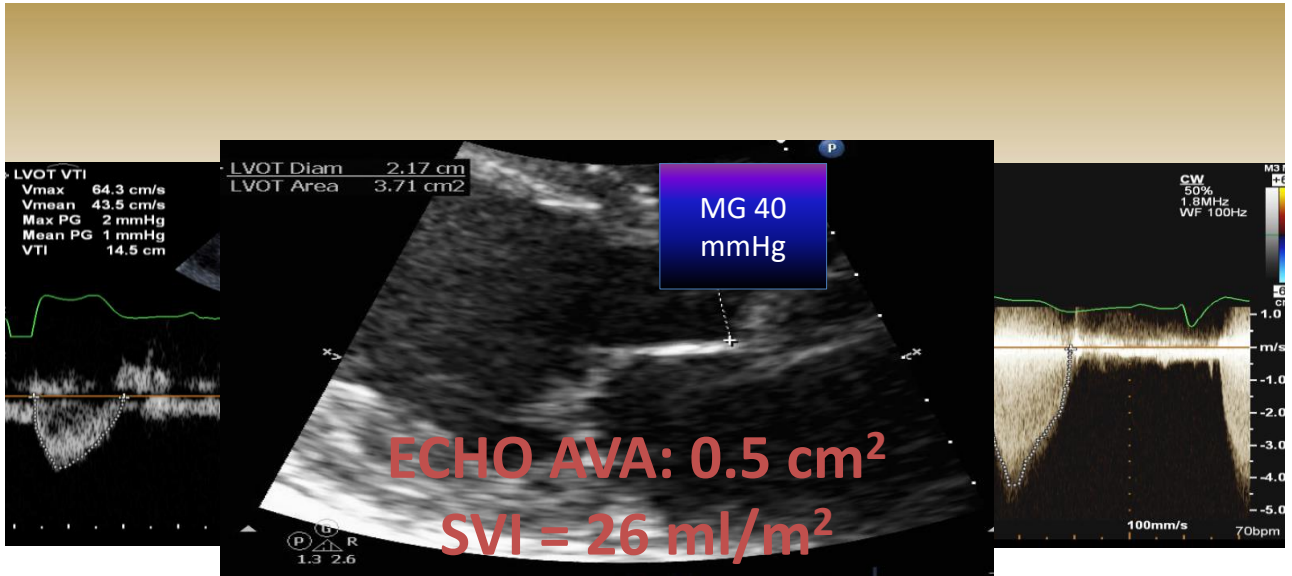
- 50 y/o female
- ESRD on HD (AV fistula)
- Recurrent heart failure x 4 months
- Negative stress test



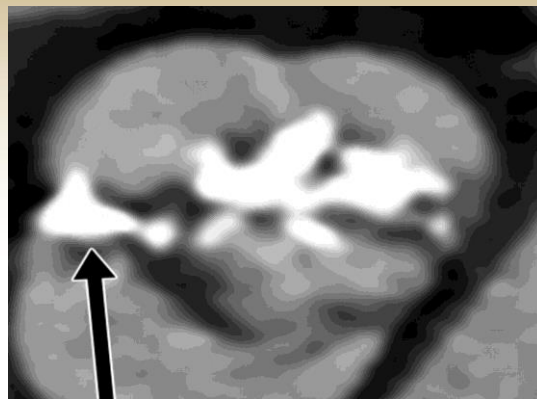


Six Months Later





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AV Calcium Score
3500 AU

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Question 2

- A. The patient has severe AS
- B. The patient needs a dobutamine echocardiogram to determine severity
- C. A bioprosthetic valve is the SAVR of choice
- D. The patient will have similar invasive and non invasive measurements



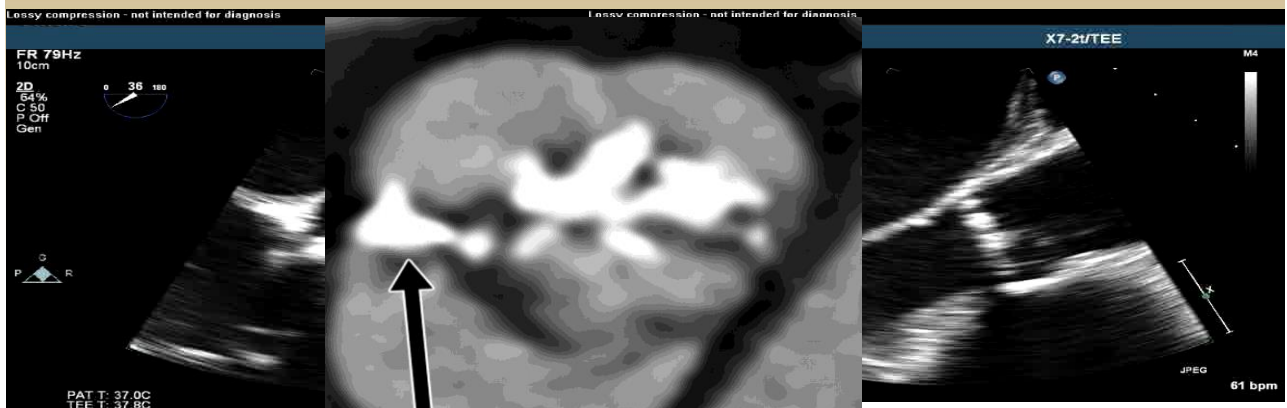
Answer to Question 2

- A. The patient has severe aortic stenosis



Question 2

- Patient was symptomatic
- Was sent home due to “moderate” AS by Cath
- No CAD noted
- Returned within 1 week for recurrent CHF despite compliance with HD
- Scheduled for TEE/CT



Cath: Mild CAD

Cardiac output: 8.4 liters/minute

$P_{\text{mean}} = 32 \text{ mmHg}$, AVA 1.4 cm^2



Severe Aortic Stenosis?

Mean AV Gradient

32-36 mmHg

Valve Area

Echo: 0.6 cm²

Cath: 1.4 cm²

AV Calcium Score

3500 AU

